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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/713,412	11/15/2000	David R. Evoy	US 008068	3111

24738 7590 08/02/2004

PHILIPS ELECTRONICS NORTH AMERICA CORPORATION
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EXAMINER

RICHER, AARON M

ART UNIT PAPER NUMBER

2676

DATE MAILED: 08/02/2004

Handwritten number 9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/713,412

Applicant(s)

EVOY, DAVID R.

Examiner

Aaron M Richer

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 9-10, 12-16, and 27-31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8, 11, 17-23, 25 and 26 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8, 11, and 17-26, drawn to transferring data between RGB and YCrCb by using a DCT block-computation engine to access data in a YCrCb buffer, classified in class 345, subclass 604.
 - II. Claims 9, 12-15, and 27-30, drawn to transferring data between RGB and YCrCb by using a DCT block-computation engine to write RGB data asynchronously to all buffers at the same time, classified in class 345, subclass 604.
 - III. Claims 10, 16, and 31, drawn to transferring data between YCrCb and RGB by asynchronously writing YCrCb values, classified in class 345, subclass 604.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I, II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as writing to all buffers at once, as opposed to only using the buffers not used by the DCT engine. Invention III has separate utility such as transferring from RGB memory to YcrCb memory by asynchronously writing YcrCb values. See MPEP § 806.05(d).

3. Because these inventions are distinct for the reasons given above and the search required for Group I, II, or III is not required for the other groups, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Peter S. Zawilski on July 19, 2004, a provisional election was made without traverse to prosecute the invention of I, claims 1-8, 11, and 17-26. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-10, 12-16, and 27-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

5. Claim 24 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 23. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Allowable Subject Matter

6. As to claims 1, 11, and 17, U.S. Patent 5,588,075 to Chiba discloses a method for transferring data between an RGB color space memory and a YCrCb color space memory useful for presentation to a DCT block-computation engine, the method comprising: providing a YCrCb intermediate buffer for storing data being transferred between the color space memories (col. 7, lines 2-11). Chiba does not disclose using at least two YCrCb buffers for storing data, nor does Chiba disclose using a DCT engine to

access data in one buffer, while using the other buffer for data accesses of RGB color space memory.

U.S. Patent 4,553,171 to Holladay discloses using multiple buffers to transfer between a memory and display. Holladay further discloses writing to one buffer while reading from the other buffer in order to transfer data quickly (col. 4, lines 37-68; col. 5, lines 1-2). It is possible to combine the multiple buffer teachings of Holladay with the YCrCb buffer teachings of Chiba to provide two YCrCb buffers for storing data, with the motivation being to transfer data faster. However, the references cannot be combined to teach a system of multiple buffers in which a DCT engine accesses one buffer while another buffer accesses an RGB memory. Chiba does not teach multiple buffers between the DCT engine and RGB memory, and Holladay does not teach a YCrCb memory, an RGB memory, or a DCT block-computation engine.

7. Claims 1-8, 11, 17-23, and 25-26 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter:

9. As to claims 1, 11, and 17, the prior art does not anticipate or suggest the limitation of "using the DCT block-computation engine to access data in one of the YcrCb intermediate buffers while using the other of the YCrCb intermediate buffers for data accesses of the RGB color space memory" with the limitation of "providing at least two YcrCb intermediate buffers for storing data being transferred between the color space memories". All of the claims listed as allowable incorporate these two limitations together in some form.

Conclusion

10. This application is in condition for allowance except for the following formal matters:

Claim 24 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 23. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Richer whose telephone number is (703) 305-5825. The examiner can normally be reached on weekdays from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (703) 308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMR
7/26/04

A handwritten signature in black ink, appearing to read "Matthew C. Bella". The signature is fluid and cursive, with the first name "Matthew" being more prominent than the last name "Bella".

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600